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Sequence Listing was accepted.

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Reviewer: markspencer

Timestamp: [year=2008; month=12; day=2; hr=15; min=52; sec=40; ms=61;]

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Application No: 10797035

Version No: 3.0

Input Set:

Output Set:

Started: 2008-10-31 15:32:40.002

Finished: 2008-10-31 15:32:55.315

Elapsed: 0 hr(s) 0 min(s) 15 sec(s) 313 ms

Total Warnings: 38

Total Errors: 0

No. of SeqIDs Defined: 46

Actual SeqID Count: 46

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)
W 213	Artificial or Unknown found in <213> in SEQ ID (21)
W 213	Artificial or Unknown found in <213> in SEQ ID (22)

Input Set:

Output Set:

Started: 2008-10-31 15:32:40.002
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Elapsed: 0 hr(s) 0 min(s) 15 sec(s) 313 ms
Total Warnings: 38
Total Errors: 0
No. of SeqIDs Defined: 46
Actual SeqID Count: 46

Error code	Error Description
	This error has occurred more than 20 times, will not be displayed
W 402	Undefined organism found in <213> in SEQ ID (40)
W 402	Undefined organism found in <213> in SEQ ID (45)

SEQUENCE LISTING

<110> KITAMURA, SATOSHI

<120> PLANT PIGMENT ACCUMULATION GENE

<130> 1975.1004

<140> 10797035

<141> 2004-03-11

<150> JP 2003-066310

<151> 2003-03-12

<160> 46

<170> PatentIn version 3.5

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<211> 645

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<213> Arabidopsis thaliana

<400> 1

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aaaaaaccag aacatcttct tcgtcagcca tttggtcaag ttccagccat agaagatgga      180
gatttcaagc tttttgaatc acgagccatc gcgagatact acgctaccaa gttcgcggac      240
caaggcacga accttttggg caagtctcta gagcaccgag ccacgtgga ccagtgggct      300
gacgtggaga cctattactt caacgttctg gcccaacccc tcgtgattaa cctaatactc      360
aagcctaggt taggcgagaa atgtgacgtc gttttggtcg aggatctcaa agtgaagcta      420
ggagtggctc tggacatata caataaccgg ctttcttcga accggttttt ggctggtgaa      480
gaattcacta tggctgattt gacgcacatg ccggcgatgg ggtacttgat gagtataacc      540
gatataaacc agatgggttaa ggctcggggg agttttaacc ggtggtggga agagatttcg      600
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<211> 214

<212> PRT

<213> Arabidopsis thaliana

<400> 2

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1              5              10              15
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20 25 30
Ile Asp Leu Asp Thr Phe Glu Gln Lys Lys Pro Glu His Leu Leu Arg
35 40 45
Gln Pro Phe Gly Gln Val Pro Ala Ile Glu Asp Gly Asp Phe Lys Leu
50 55 60
Phe Glu Ser Arg Ala Ile Ala Arg Tyr Tyr Ala Thr Lys Phe Ala Asp
65 70 75 80
Gln Gly Thr Asn Leu Leu Gly Lys Ser Leu Glu His Arg Ala Ile Val
85 90 95
Asp Gln Trp Ala Asp Val Glu Thr Tyr Tyr Phe Asn Val Leu Ala Gln
100 105 110
Pro Leu Val Ile Asn Leu Ile Ile Lys Pro Arg Leu Gly Glu Lys Cys
115 120 125
Asp Val Val Leu Val Glu Asp Leu Lys Val Lys Leu Gly Val Val Leu
130 135 140
Asp Ile Tyr Asn Asn Arg Leu Ser Ser Asn Arg Phe Leu Ala Gly Glu
145 150 155 160
Glu Phe Thr Met Ala Asp Leu Thr His Met Pro Ala Met Gly Tyr Leu
165 170 175
Met Ser Ile Thr Asp Ile Asn Gln Met Val Lys Ala Arg Gly Ser Phe
180 185 190
Asn Arg Trp Trp Glu Glu Ile Ser Asp Arg Pro Ser Trp Lys Lys Leu
195 200 205
Met Val Leu Ala Gly His
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<211> 20

<212> DNA

<213> Artificial Sequence

<220>
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primer

<400> 3
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<210> 4
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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
primer

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<210> 5
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<212> DNA
<213> Artificial Sequence

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primer

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gtggttgttg ggaagagaag 20

<210> 6
<211> 20
<212> DNA
<213> Artificial Sequence

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primer

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cgatggctcg tgattcttag 20

<210> 7
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<212> DNA
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primer

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gggtcaagttc cagccataga 20

<210> 8
<211> 20
<212> DNA
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<220>
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primer

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<210> 9
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primer

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<210> 10
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primer

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<210> 11
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primer

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<210> 12

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 <210> 13
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 primer

 <400> 13
 aaccggttcg aagaaagccg gttat 25

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 <210> 15
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 <210> 16
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<400> 16

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<210> 17

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic primer

<400> 17

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24

<210> 18

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic primer

<400> 18

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24

<210> 19

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic primer

<400> 19

cgatggctcg gtgctctaga gact

24

<210> 20

<211> 16

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic primer

<220>

<221> modified_base
<222> (1)..(1)
<223> a, c, g or t

<220>
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<222> (11)..(11)
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<400> 20
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16

<210> 21
<211> 16
<212> DNA
<213> Artificial Sequence

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primer

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16

<210> 22
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<220>
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primer

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<210> 23
<211> 30
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<210> 24
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ggttcttcag atcatcataa attggagcta 30

<210> 25
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primer

<400> 25
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<210> 26
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primer

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<210> 27
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<211> 26
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 <210> 34
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 <210> 35
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primer

<400> 35

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22

<210> 36

<211> 22

<212> DNA

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primer

<400> 36

aaagcgctta catcggtgtg ag

22

<210> 37

<211> 26

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
primer

<400> 37

ggatccatgg ttgtgaaagt gcatgg

26

<210> 38

<211> 26

<212> DNA

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primer

<400> 38

gagctcgtcc cgtactccac aacaat

26

<210> 39

<211> 214

<212> PRT

<213> Arabidopsis thaliana

<400> 39

Met Val Val Lys Val Tyr Gly Gln Ile Lys Ala Ala Asn Pro Gln Arg

1

5

10

15

Val Leu Leu Cys Phe Leu Glu Lys Asp Ile Glu Phe Glu Val Ile His

20

25

30

Val Asp Leu Asp Lys Leu Glu Gln Lys Lys Pro Gln His Leu Leu Arg
 35 40 45

Gln Pro Phe Gly Gln Val Pro Ala Ile Glu Asp Gly Tyr Leu Lys Leu
 50 55 60

Phe Glu Ser Arg Ala Ile Ala Arg Tyr Tyr Ala Thr Lys Tyr Ala Asp
 65 70 75 80

Gln Gly Thr Asp Leu Leu Gly Lys Thr Leu Glu Gly Arg Ala Ile Val
 85 90 95

Asp Gln Trp Val Glu Val Glu Asn Asn Tyr Phe Tyr Ala Val Ala Leu
 100 105 110

Pro Leu Val Met Asn Val Val Phe Lys Pro Lys Ser Gly Lys Pro Cys
 115 120 125

Asp Val Ala Leu Val Glu Glu Leu Lys Val Lys Phe Asp Lys Val Leu
 130 135 140

Asp Val Tyr Glu Asn Arg Leu Ala Thr Asn Arg Tyr Leu Gly Gly Asp
 145 150 155 160

Glu Phe Thr Leu Ala Asp Leu Ser His Met Pro Gly Met Arg Tyr Ile
 165 170 175

Met Asn Glu Thr Ser Leu Ser Gly Leu Val Thr Ser Arg Glu Asn Leu
 180 185 190

Asn Arg Trp Trp Asn Glu Ile Ser Ala Arg Pro Ala Trp Lys Lys Leu
 195 200 205

Met Glu Leu Ala Ala Tyr
 210

<210> 40

<211> 232

<212> PRT

<213> Petunia sp.

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20 25 30

Val Asp Leu Asp Ser Leu Glu Gln Lys Lys Pro Glu Phe Leu Val Leu
35 40 45

Gln Pro Phe Gly Gln Val Pro Val Ile Glu Asp Gly Asp Phe Arg Leu
50 55 60

Phe Glu Ser Arg Ala Ile Ile Arg Tyr Tyr Ala Ala Lys Tyr Glu Val
65 70 75 80

Lys Gly Ser Lys Leu Thr Gly Thr Thr Leu Glu Glu Lys Ala Leu Val
85 90 95

Asp Gln Trp Leu Glu Val Glu Ser Asn Asn Tyr Asn Asp Leu Val Tyr
100 105 110

Asn Met Val Leu Gln Leu Leu Val Phe Pro Lys Met Gly Gln Thr Ser
115 120 125

Asp Leu Thr Leu Val Thr Lys Cys Ala Asn Lys Leu Glu Asn Val Phe
130 135 140

Asp Ile Tyr Glu Gln Arg Leu Ser Lys Ser Lys Tyr Leu Ala Gly Glu
145 150 155 160

Phe Phe Ser Leu Ala Asp Leu Ser His Leu Pro Ser Leu Arg Phe Leu
165 170 175

Met Asn Glu Gly Gly Phe Ser His Leu Val Thr Lys Arg Lys Cys Leu
180 185 190

His Glu Trp Tyr Leu Asp Ile Ser Ser Arg Asp Ser Trp Lys Lys Val
195 200 205

Leu Asp Leu Met Met Lys Lys Ile Ser Glu Ile Glu Ala Val Ser Ile
210 215 220

Pro Ala Lys Glu Glu Ala Lys Val

225

230

<210> 41

<211> 213

<212> PRT

<213> *Nicotiana tabacum*

<400> 41

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20 25 30

Val Asp Met Ala Ser Gly Glu His Lys Lys His Pro Tyr Leu Ser Leu
35 40 45

Asn Pro Phe Gly Gln Val Pro Ala Phe Glu Asp Gly Asp Leu Lys Leu
50 55 60

Phe Glu Ser Arg Ala Ile Thr Gln Tyr Ile Ala His Val Tyr Ala Asp
65 70 75 80

Asn Gly Tyr Gln Leu Ile Leu Gln Asp Pro Lys Lys Met Pro Ser Met
85 90 95

Ser Val Trp Met Glu Val Glu Gly Gln Lys Phe Glu Pro Pro Ala Thr
100 105 110

Lys Leu Thr Trp Glu Leu Gly Ile Lys Pro Ile Ile Gly Met Thr Thr
115 120 125

Asp Asp Ala Ala Val Lys Glu Ser Glu Ala Gln Leu Ser Lys Val Leu
130 135 140

Asp Ile Tyr Glu Thr Gln Leu Ala Glu Ser Lys Tyr Leu Gly Gly Asp
145 150 155 160

Ser Phe Thr Leu Val Asp Leu His His Ile Pro Asn Ile Tyr Tyr Leu
165 170 175

Met Ser Ser Lys Val Lys Glu Val Phe Asp Ser Arg Pro Arg Val Ser
180 185 190

Ala Trp Cys Ala Asp Ile Leu Ala Arg Pro Ala Trp Val Lys Gly Leu
195 200 205

Glu Lys Leu Gln Lys
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<213> Zea mays

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1 5 10 15

Arg Val Ala Thr Val Leu Asn Glu Lys Gly Leu Asp Phe Glu Ile Val